Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VI (NEW) - EXAMINATION – SUMMER 2018

Subject Code:2161009   **Date:08/05/2018**
Subject Name:Telecommunication Switching and Applications
Time:10:30 AM to 01:00 PM   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	How the switching systems can be classified?	**03**
	(b)	What is the purpose of traffic engineering?	**04**
	(c)	List and explain elements of communication switching system	**07**
Q.2	**(a)**	What is delay system?	**03**
	(b)	Explain the two types of congestion.	**04**
	(c)	What is GOS and blocking probability? Explain in detail	**07**

<p align="center">OR</p>

	(c)	List the models of loss systems. Explain Lost Calls Cleared (LCC) System	**07**
Q.3	**(a)**	What is baud rate and bit rate?	**03**
	(b)	Draw and explain in brief the format of a packet in packet switching network.	**04**
	(c)	Explain packet switching.	**07**

<p align="center">OR</p>

Q.3	**(a)**	Define LAN MAN and WAN.	**03**
	(b)	Explain Datagram in routing control.	**04**
	(c)	Explain ISO-OSI reference model.	**07**
Q.4	**(a)**	Define time multiplexed space switching.	**03**
	(b)	List ISDN new services.	**04**
	(c)	Explain SPC in detail.	**07**

<p align="center">OR</p>

Q.4	**(a)**	Define time multiplexed time switching.	**03**
	(b)	List charging plan imposed on subscriber by telecom operator. Explain each of them if brief.	**04**
	(c)	With equation explain three stage switching structure of Space division switching.	**07**
Q.5	**(a)**	What is broadband ISDN?	**03**
	(b)	List advantages of ISND	**04**
	(c)	What is numbering plan in telephone network? explain in detail	**07**

<p align="center">OR</p>

Q.5 **(a)** What is Inchannel signaling and Common channel signaling? **03**

(b) Explain Mesh-connected network in routing. **04**

(c) Explain voice data integration in detail. **07**

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